

***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES***

Applicant: Fabio GIANETTI
Title: METHOD AND DEVICE FOR
DELIVERING DATA
Appl. No.: 10/668,207
Filing Date: 9/24/2003
Examiner: Greg C. Bengzon
Art Unit: 2144
Confirmation Number: 1593

BRIEF ON APPEAL

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Sir:

Under the provisions of 37 C.F.R. § 41.37, this Appeal Brief is being filed together with a credit card payment form in the amount of \$510.00 covering the 37 C.F.R. 41.20(b)(2) appeal fee. If this fee is deemed to be insufficient, authorization is hereby given to charge any deficiency (or credit any balance) to the undersigned deposit account 08-2025.

REAL PARTY IN INTEREST

The real party in interest is the assignee of record, Hewlett-Packard Development Company, L.P.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences that will directly affect, be directly affected by or have a bearing on the present appeal, that are known to appellant, the assignee, or the appellant's patent representative. The Related Proceedings Appendix, attached hereto, states "None"

STATUS OF CLAIMS

The present appeal is directed to claims 1-21 all of the presently pending claims in the application. A copy of the pending claims is presented in the CLAIMS APPENDIX. These claims have been finally rejected. Rejections of claims 1-21 are appealed.

STATUS OF AMENDMENTS

No amendments are being filed with this Appeal Brief. There are no amendments outstanding at the time of filing of this Appeal Brief.

SUMMARY OF CLAIMED SUBJECT MATTER

The invention relates to a method and apparatus for delivering data to one or more computing devices, for example, a remote computing device (page 1, lines 6-9). Data to be sent to a computing device is stored in a predetermined template that provides a plurality of fields that are able to contain a portion of the data to be sent. (page 11, lines 20-25; page 12, lines 4-8 and 29-31). Mappings are provided to map the data to other templates (page 13, lines 7-8). It is determined whether the data receiving device can handle the data according to the predetermined template (page 15, lines 17-26). If the device cannot handle the data

according to the predetermined template, the data is mapped to another template (page 15, lines 17-26).

Independent claim 1 recites a method of delivering data to at least one data-handling device, the method comprising the steps of:

- i. storing data that is intended for transmission to the data-handling device according to a predetermined template which provides a plurality of fields, each of the fields being capable of containing a portion of the data (page 11, lines 20-25; page 12, lines 4-8 and 29-31; Figure 5, steps 500 and 504);
- ii. storing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template (page 13, lines 7-8; page 15, lines 17-26; Figure 5, steps 502 and 508); and
- iii. transmitting the data to the data-handling device (page 16, line 15; Figure 5, step 510).

Independent claim 9 recites a computing device capable of delivering data to at least one data-handling device (page 1, lines 6-9), the computing device comprising a receiving means for receiving a request for data (page 10, lines 3-11; processing circuitry 106; page 15, lines 17-21; Figure 5, step 506), a transmitting means arranged to transmit data (page 10, lines 20-22; page 16, line 15; Figure 5, step 510), a processing means arranged to process data and a storage means for storing data (page 10, lines 3-11; page 11, lines 1-4), the receiving means is arranged to communicate the receipt of a request for data to the processing means which is arranged, upon the receipt of such a communication, to retrieve data from the storage means which has been stored according to a predetermined template which provides a plurality of fields such that each of the fields is capable of containing a portion of the data (page 12, lines 4-8 and 29-31; page 15, lines 17-26; Figure 5, steps 504 and 506), the storage means also being arranged to store mappings which are arranged to map data held in fields of the predetermined template to fields within alternative templates (page 13, lines 7-8 and 16-19; Figure 5, steps 500 and 502), the processing means being capable of mapping data stored

in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitting means for transmission (page 13, lines 7-30; page 15, lines 17-26; page 16, line 15; Figure 5, steps 502, 508 and 510).

Independent claim 10 recites a network capable of delivering data to at least one data-handling device (page 1, lines 6-9), the network comprising a receiving means for receiving a request for data (page 10, lines 3-11; processing circuitry 106; page 15, lines 17-21; Figure 5, step 506), a transmitting means arranged to transmit data (page 10, lines 20-22; page 16, line 15; Figure 5, step 510) a processing means arranged to process data and a storage means for storing data (page 10, lines 3-11; page 11, lines 1-4), the receiving means is arranged to communicate the receipt of a request for data to the processing means which is arranged, upon the receipt of such a communication, to retrieve data from the storage means which has been stored according to a predetermined template which provides a plurality of fields such that each of the fields is capable of containing a portion of the data (page 12, lines 4-8 and 29-31; page 15, lines 17-26; Figure 5, steps 504 and 506), the storage means also being arranged to store mappings which are arranged to map data held in fields of the predetermined template to fields within alternative templates (page 13, lines 7-8 and 16-19; Figure 5, steps 500 and 502), the processing means being capable of mapping data stored in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitting means for transmission (page 13, lines 7-30; page 15, lines 17-26; page 16, line 15; Figure 5, steps 502, 508 and 510).

Independent claim 16 recites a method of delivering data to at least one data-handling device, the method comprising the steps of:

- i. storing data that is intended for transmission to the data-handling device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields being capable of containing a portion of the data (page 11, lines 20-25; page 12, lines 4-8 and 29-31; Figure 5, steps 500 and 504);

ii. storing a plurality of mappings that map data held within a field of one of the predetermined templates to fields within an alternative template should it be determined that the data-handling device to which the data is to be sent is not capable of handling data held in the predetermined template (page 13, lines 7-8; page 15, lines 17-26; Figure 5, steps 502 and 508);

iii. altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data (page 15, lines 23-26; Figure 5, step 508);
and

iv. transmitting the data to the data-handling device (page 16, line 15; Figure 5, step 510).

Independent claim 18 recites a method of delivering data to at least one data-handling device, the method comprising the steps of:

i. storing data that is intended for transmission to the data-handling device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields being capable of containing a portion of the data (page 11, lines 20-25; page 12, lines 4-8 and 29-31; Figure 5, steps 500 and 504);

ii. storing a plurality of mappings that map data held within a field of one of the predetermined templates to fields within an alternative template should it be determined that the data-handling device to which the data is to be sent is not capable of handling data held in the predetermined template (page 13, lines 7-8; page 15, lines 17-26; Figure 5, steps 502 and 508), the predetermined mappings including at least a preferred mapping which is performed in preference to other mappings should it be determined that a mapping is required and a default mapping that is performed if other mappings do not map the data such that it can be handled by the data-handling device (page 14, lines 6-20);

iii. altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data (page 15, lines 23-26; Figure 5, step 508);
and

iv. transmitting the data to the data-handling device (page 16, line 15; Figure 5, step 510).

Independent claim 19 recites a computing device capable of delivering data to at least one data-handling device, the computing device comprising a receiver (page 10, lines 20-24), a transmitter (page 10, lines 20-24), a processor and a memory (page 10, lines 23-4: processing unit 112 and memory 118), the receiver is arranged to communicate the receipt of a request for data to the processor which is arranged, upon the receipt of such a request, to retrieve data from the memory which has been stored in the memory in one of a plurality of predetermined templates each of which provides a plurality of fields such that each of the fields is capable of containing a portion of the data (page 12, lines 4-8 and 29-31; page 15, lines 17-26; Figure 5, steps 504 and 506), the memory also being arranged to store mappings which are arranged to map data held in fields of the predetermined template to fields within alternative templates (page 13, lines 7-8 and 16-19; Figure 5, steps 500 and 502), the processor being capable of mapping data stored in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitter for transmission (page 13, lines 7-30; page 15, lines 17-26; page 16, line 15; Figure 5, steps 502, 508 and 510).

Independent claim 20 recites a network capable of delivering data to at least one data-handling device, the network comprising a receiver (page 10, lines 20-24), a transmitter (page 10, lines 20-24), a processor and a memory (page 10, lines 23-4: processing unit 112 and memory 118), the receiver is arranged to communicate the receipt of a request for data to the processor which is arranged, upon the receipt of such a request, to retrieve data from the memory which has been stored according to one of a plurality of predetermined templates each of which provides a plurality of fields such that each of the fields is capable of containing a portion of the data (page 12, lines 4-8 and 29-31; page 15, lines 17-26; Figure 5, steps 504 and 506), the memory also being arranged to store mappings which are arranged to map data held in fields of the predetermined template to fields within alternative templates (page 13, lines 7-8 and 16-19; Figure 5, steps 500 and 502), the processor being capable of

mapping data stored in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitter for transmission (page 13, lines 7-30; page 15, lines 17-26; page 16, line 15; Figure 5, steps 502, 508 and 510).

Independent claim 21 recites a method of sending data to at least one remote device, the method comprising the steps of:

- i. storing data that it is intended to send to the remote device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields allowing a portion of the data to be stored therein (page 11, lines 20-25; page 12, lines 4-8 and 29-31; Figure 5, steps 500 and 504);
- ii. storing a plurality of transformations that transform data held within one of the plurality of templates such that the data then corresponds to an alternative template such that data held in a field of one of the predetermined templates is moved to a field within the alternative template (page 13, lines 7-8; page 15, lines 17-26; Figure 5, steps 502 and 508);
- iii. transforming the data according to one of the transformations should it be determined that the remote device cannot handle the data as it is stored in the predetermined template (page 15, lines 23-26; Figure 5, step 508);
- iv. and sending the data to the remote device (page 16, line 15; Figure 5, step 510).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are:

(1): whether the examiner erred in rejecting claims 12-15 under 35 U.S.C. 101 as being directed to non-statutory subject matter,

(2): whether the examiner erred in rejecting claims 1-5, 7, 9-16 and 19-21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,898,618 to Slaughter et al. (hereinafter “Slaughter”), and

(3): whether the examiner erred in rejecting claims 6,8,17 and 18 under 35 U.S.C. 103(a) as being unpatentable over Slaughter in view of U.S. Patent 6,980,993 to Horvitz et al. (hereinafter “Horvitz”).

ARGUMENT

I. The rejection of claims 12-15 under 35 U.S.C. § 101 as being directed to non-statutory subject matter

All of claims 12-15 are directed to a computer readable medium containing computer code which when read by a computing device cause that computing device substantially to perform a method, for example, of delivering data to at least one handling device. It is black letter law that such computer readable medium claims are proper statutory subject matter. Thus, claims 12-15 all constitute statutory subject matter, and satisfy the requirements of 35 U.S.C. § 101.

These claims are in accordance with the Interim Guidelines for Examination of Patent Applications for Patent Applications for Patent Subject Matter Eligibility, which explicitly state:

“When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory).” (page 50, lines 12-18 of the Interim Guidelines)

Thus, Applicants respectfully submit that claims 12-15 meet the requirements of the Interim Guidelines for statutory subject matter, by recording functional descriptive material on a computer-readable medium that permits the function of the descriptive material to be

realized. Thus, Applicants respectfully submit that claims 12-15 all constitute statutory subject matter, and satisfy the requirements of 35 U.S.C. § 101.

To avoid any misunderstanding, Applicants disclaim any interpretation of “computer-readable medium” that covers a transmitted signal.

II. It is respectfully submitted that the final rejection of claims 1-5, 7, 9-16 and 19-21 under 35 U.S.C. § 102(b) is erroneous for at least the following reason.

i. Independent claims 9, 10, 16 and 18-21:

Independent claim 16 recites (with emphasis added):

A method of delivering data to at least one data-handling device, the method comprising the steps of:

- i. storing data that is intended for transmission to the data-handling device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields being capable of containing a portion of the data
- ii. **storing a plurality of mappings that map data held within a field of one of the predetermined templates to fields within an alternative template should it be determined that the data-handling device to which the data is to be sent is not capable of handling data held in the predetermined template;**
- iii. **altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data; and**
- iv. transmitting the data to the data-handling device.

Thus, the method of delivering data to a remote computer involves storing data in a predetermined template that provides a plurality of fields that are able to contain portions of the data to be sent. Mappings are provided to map the data to other templates. It is determined whether the data receiving device can handle the data according to the predetermined template, and if the device cannot handle the data according to the predetermined template, the data is altered according to one of the mappings. See, for example, the description on pages 10 to 17 of the specification and Figures 3 -5 of the drawings.

Slaughter is directed towards a client-specified display service in a distributed computing environment (Abstract). Specifically, Slaughter teaches a display service for displaying on a device on which the client resides to display results of the service. When the client runs the service, the client may send a message to the service specifying the service advertisement of the client's display service. The service may then generate a message channel that allows it to send messages to the client's display service. Thus, the service invoked by the client becomes a client of the client's display service and sends its results for display to that display service. (Abstract of Slaughter). The services provided to the client can be negotiated, to generate a service advertisement in XML that utilizes a specific schema to specify communication between the client and the service. (column 35, lines 19-49)

Slaughter fails to teach the features of the invention as claimed, specifically failing to teach “storing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template,” (Independent claims 1 and 16), and also failing to teach or disclose “altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data.” (Independent claim 16).

As mentioned above, Slaughter teaches displaying the results of a service on a client device, utilizing XML messages to communicate between the client and service. (column 15, lines 65-67) Further, Slaughter teaches that a service advertisement in XML can be negotiated between the service and the client. An application can then utilize a schema from a service advertisement to display data on the client device. (column 85, lines 23-27). An application can utilize more than one schema (called presentation schemas) (column 85, lines 64-65) Slaughter explicitly teaches:

“The client may map the data elements to corresponding presentation elements from the schema, and may use the information in the presentation element corresponding to each data element to format and present the data element. In one embodiment, a display service may perform the mapping and displaying of data elements on behalf of the client.” (column 87, lines 55-60)

However, there is no teaching or indication in Slaughter that mappings are stored to map the data to fields within alternative templates from the presentation elements from the schema, or that the data is altered according to one of the mappings. Rather, Slaughter teaches that:

“application **1320** may invoke a discovery and/or lookup service to locate presentation schema advertisements. The discovery and/or lookup service may return an XML document listing one or more advertisements, and URIs to each of the schemas describing a particular display format, etc. Application **1320** may then select a presentation schema or schemas from the XML document. Application **1320** may then parse the schema, breaking out the elements of the schema into user interface components.” (column 86, lines 1-10; emphasis added)

Thus, Slaughter teaches that the application decides which presentation schema should be used to display the results data. There is no disclosure in Slaughter of storing mappings that can map data from one presentation schema to another. Slaughter teaches that more than one presentation schema can be used, but does not teach that mappings are stored to map data that has been mapped to one schema to another schema. Further, Slaughter fails to teach altering the data according to one of the mappings if it is determined that the data-handling device cannot handle the data in the existing schema. In fact, there is no suggestion or teaching in Slaughter that once a presentation schema is chosen, another could be utilized, and data could be re-mapped. Further, Slaughter fails to teach that a determination is made if the client device can handle receipt of data stored in a specific schema. Rather, the schemas to be utilized between the client and the service have already been negotiated. There is no teaching or suggestion in Slaughter that a determination is made whether or not the client device would be capable of handling data in a predetermined data. Further, Slaughter fails to teach action being taken if it is determined the client device is unable to handle data in the schema that is has negotiated with the service.

Slaughter fails to teach or suggest a determination that the data-handling device is not capable of handling data in the predetermined template. Slaughter also fails to teach altering the data according to one of the mappings, if it has been determined that the data-handling device is not capable of handling the data. Rather, the Office refers to the negotiation of

capabilities of services through the agreement of service parameters to teach this determination and altering of data from one template to another:

“In one embodiment, the distributed computing environment may provide a mechanism by which a client may negotiate capabilities with services. In one embodiment, the client may negotiate its capabilities to the service. The service may then customize results based on the parameters negotiated with the client. For example, a client that is capable of one bit display at a resolution of 160×200 may negotiate these parameters to the service, thus allowing the service to customize results for the client.

The distributed computing environment may include a mechanism that may allow clients to negotiate how a service is to return results of a service invocation. In one embodiment, during a capability credential request, a means by which to choose one of the results return methods may be conveyed to the service. **The service may then generate a custom service advertisement that may convey to the client the results mechanism to be used, as well as the service interface.**” (column 35, lines 32-49; emphasis added)

Thus, after negotiating the parameters of the communication between the client and the service, a schema is generated. However, generating a schema based upon negotiations between a client and service is in no way equivalent to storing mappings to map data from fields in a predetermined template to fields within alternative templates, if it has been determined that a data handling device is not capable of handling data held in the predetermined template. Further, there is no suggestion or teaching in Slaughter that once a presentation schema is chosen, another could be utilized, and data could be re-mapped, such that the data is altered according to one of the mappings if it were to be determined that the data-handling device cannot handle the data according to the initial presentation schema. This disclosure of Slaughter instead asserts that a template is predetermined through negotiations between a client and a service. Further, there is no teaching or suggestion of a re-negotiation of a template in Slaughter, let alone altering of data according to a mapping.

To that end, the outstanding Office Action fails to teach or suggest “storing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template.” The Office refers to Slaughter to teach storing mappings, specifically referring to the following passage of Slaughter:

“The client may map the data elements to corresponding presentation elements from the schema, and may use the information in the presentation element corresponding to each data element to format and present the data element. In one embodiment, a display service may perform the mapping and displaying of data elements on behalf of the client.” (column 87, lines 55-60)

As taught above, the application determines the presentation schema or schemas to utilized, such that the client maps the presentation elements from one schema. However, there is no teaching or suggestion that mappings are stored that map the presentation elements from one schema to elements in another schema. Mapping data to a schema is in no way equivalent to mapping elements of one schema to elements of another schema. Further, mapping data to a schema does not provide any teaching or suggestion that mappings are stored that map data from one schema to another. Thus, Slaughter fails to teach storing mappings that map the data within the fields of a predetermined template to fields within alternate templates.

The Office also referred to Slaughter to teach alternative templates:

“Alternatively, a presentation schema may include information for displaying a variety of results for one or more clients. Thus, client 1328 may use one presentation schema or a plurality of presentation schemas. Two or more presentation schemas may be provided for formatting and displaying the same results for different formats, or in different displays.” (column 86, lines 50-55)

However, potentially utilizing more than one presentation schema is not equivalent to mapping data within the fields of a predetermined template to fields within alternate templates. There is no teaching or suggestion in Slaughter that data is mapped from one presentation schema to another schema.

Further, the Office referred to the negotiation between the service and the client to teach a determination if the client can handle the data in the predetermined template. (column

35, lines 35-40) The Office also utilized this negotiation to allegedly teach “altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data.” However, as shown above, Slaughter utilizes this negotiation to create a template for communication, rather than determine if an existing template is sufficient. Further, Slaughter fails to teach storing, or utilizing, mappings to map data from one template to another. Thus, Slaughter fails to teach or suggest a determination or alteration of data as required by the invention as claimed.

Thus, it is respectfully submitted that Slaughter fails to contain, teach, or disclose “providing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template” or “altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data.” As such, since there is no teaching or suggestion of “providing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template” or “altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data” in Slaughter, it cannot anticipate independent claims 9, 10 and 19-21 (whereby independent claims 9, 10 and 18-21 recite similar features to those discussed above with respect to claim 16).

ii. *Independent claim 1:*

Independent claim 1 recites (with emphasis added):

A method of delivering data to at least one data-handling device, the method comprising the steps of:

- i. storing data that is intended for transmission to the data-handling device according to a predetermined template which provides a plurality of fields, each of the fields being capable of containing a portion of the data;

- ii. **storing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template;** and
- iii. transmitting the data to the data-handling device.

Independent claim 1 recites similar features to independent claim 16, including the feature of “storing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template.” As shown above, Slaughter fails to teach this feature of the invention.

Thus, it is respectfully submitted that Slaughter fails to contain, teach, or disclose “providing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template.” As such, since there is no teaching or suggestion of “providing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template” in Slaughter, it cannot anticipate independent claim 1 (whereby independent claim 1 recites similar features to those discussed above with respect to claim 16).

III. It is respectfully submitted that the final rejection of claims 6, 8, 17 and 18 under 35 U.S.C. 103(a) is erroneous for at least the following reason.

Horvitz in no way makes up for the deficiencies of Slaughter as described above.

i. Independent claims 1, 9, 10, 16 and 18-21:

Independent claim 16 recites (with emphasis added):

A method of delivering data to at least one data-handling device, the method comprising the steps of:

- i. storing data that is intended for transmission to the data-handling device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields being capable of containing a portion of the data
- ii. **storing a plurality of mappings that map data held within a field of one of the predetermined templates to fields within an alternative template should it be determined that the data-handling device to which the data is to be sent is not capable of handling data held in the predetermined template;**
- iii. **altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data; and**
- iv. transmitting the data to the data-handling device.

There is no teaching or suggestion in Horvitz of “providing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template.” Horvitz also fails to teach or disclose “altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data.” Rather, Horvitz appears to be directed towards a schema-based notification platform that utilizes information-service schemas and services to communicate information to subscribing recipient devices. (Abstract) Horvitz provides a number of schema-based services that facilitate data access based on the identity of a user, with the schemas dependent on the type of data they are intended to organize. (column 7, line 22 to column 8, line 7). There is no teaching or disclosure in Horvitz that data is mapped from one schema to another, if the recipient device is unable to handle data in the first schema, or that such mappings are stored. Given the teachings of Horvitz, it is clear that Horvitz does not make up for the deficiencies of Slaughter as shown above.

Consequently, the combination of Horvitz with Slaughter is improper and the motivation to make such a combination is lacking. As such, the combined teachings of Slaughter and Horvitz cannot do not teach the features of pending claims 1-21.


CONCLUSION

In view of the above, Appellants respectfully solicit the Honorable Board of Patent Appeals and Interferences to reverse the rejections of the pending claims and pass this application on to allowance.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Previously Presented) A method of delivering data to at least one data-handling device, the method comprising the steps of:
 - i. storing data that is intended for transmission to the data-handling device according to a predetermined template which provides a plurality of fields, each of the fields being capable of containing a portion of the data;
 - ii. storing mappings that map the data within the fields of the predetermined template to fields within alternative templates should it be determined that the data-handling device is not capable of handling data held in the predetermined template; and
 - iii. transmitting the data to the data-handling device.
2. (Original) A method according to claim 1 in which the method provides a plurality of predetermined templates in any one of which data may be stored.
3. (Original) A method according to claim 2 in which the method provides a plurality of alternative templates such that data provided in any of the predetermined templates can be mapped to at least one of the alternative templates.
4. (Original) A method according to claim 3 which comprises specifying a plurality of mappings from the predetermined to the alternative templates.
5. (Original) A method according to claim 4 which ensures that at least one mapping allows data to be mapped to an alternative template such that the data can be handled by substantially all data-handling devices that may be sent data.

6. (Original) A method according to claim 4 in which at least a preferred and an alternative mapping are defined.

7. (Original) A method according to claim 1 which comprises determining whether the data-handling device is capable of handling data before transmission to the data-handling device and mapping the data using the mappings should it be determined that the data-handling device cannot handle the predetermined template.

8. (Original) A method according to claim 1 in which the method is arranged to determine whether the data-handling device is capable of handling the data after it has been transmitted to the data-handling device.

9. (Original) A computing device capable of delivering data to at least one data-handling device, the computing device comprising a receiving means for receiving a request for data, a transmitting means arranged to transmit data, a processing means arranged to process data and a storage means for storing data, the receiving means is arranged to communicate the receipt of a request for data to the processing means which is arranged, upon the receipt of such a communication, to retrieve data from the storage means which has been stored according to a predetermined template which provides a plurality of fields such that each of the fields is capable of containing a portion of the data, the storage means also being arranged to store mappings which are arranged to map data held in fields of the predetermined template to fields within alternative templates, the processing means being capable of mapping data stored in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitting means for transmission.

10. (Original) A network capable of delivering data to at least one data-handling device, the network comprising a receiving means for receiving a request for data, a transmitting means arranged to transmit data, a processing means arranged to process data and a storage means for storing data, the receiving means is arranged to communicate the receipt of a request for data to the processing means which is arranged, upon the receipt of such a communication, to retrieve data from the storage means which has been stored according to a predetermined template which provides a plurality of fields such that each of the fields is capable of containing a portion of the data, the storage means also being arranged to store mappings which are arranged to map data held in fields of the predetermined template to fields within alternative templates, the processing means being capable of mapping data stored in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitting means for transmission.

11. (Original) A data-handling device capable of communicating with a computing device and/or network and receiving data therefrom, the data-handling device being arranged to communicate a parameter such that the method of claim 1 can be applied to the data that is sent to the data-handling device.

12. (Previously Presented) A computer-readable medium containing computer code which when read by a computing device cause that computing device substantially to perform the method of claim 1.

13. (Previously Presented) A computer-readable medium containing computer code which when read by a computing device cause that computing device to function substantially as the computing device of claim 9.

14. (Previously Presented) A computer-readable medium containing computer code which when read by a computing device of a network cause that network to function substantially as the network of claim 10.

15. (Previously Presented) A computer-readable medium containing computer code which when read by a data-handling device cause that data-handling device to function substantially as the data-handling device as the data handling device of claim 11.

16. (Previously Presented) A method of delivering data to at least one data-handling device, the method comprising the steps of:

i. storing data that is intended for transmission to the data-handling device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields being capable of containing a portion of the data;

ii. storing a plurality of mappings that map data held within a field of one of the predetermined templates to fields within an alternative template should it be determined that the data-handling device to which the data is to be sent is not capable of handling data held in the predetermined template;

iii. altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data; and iv. transmitting the data to the data-handling device.

17. (Original) A method according to claim 16 which allows the mappings to be ranked such that at least one of the mappings is performed in preference to at least one of the other mappings.

18. (Previously Presented) A method of delivering data to at least one data-handling device, the method comprising the steps of:

i. storing data that is intended for transmission to the data-handling device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields being capable of containing a portion of the data;

ii. storing a plurality of mappings that map data held within a field of one of the predetermined templates to fields within an alternative template should it be determined that the data-handling device to which the data is to be sent is not capable of handling data held in the predetermined template, the predetermined mappings including at least a preferred mapping which is performed in preference to other mappings should it be determined that a mapping is required and a default mapping that is performed if other mappings do not map the data such that it can be handled by the data-handling device;

iii. altering the data according to one of the mappings should it be determined that the data-handling device cannot handle the data; and

iv. transmitting the data to the data-handling device.

19. (Original) A computing device capable of delivering data to at least one data-handling device, the computing device comprising a receiver, a transmitter, a processor and a memory, the receiver is arranged to communicate the receipt of a request for data to the processor which is arranged, upon the receipt of such a request, to retrieve data from the memory which has been stored in the memory in one of a plurality of predetermined templates each of which provides a plurality of fields such that each of the fields is capable of containing a portion of the data, the memory also being arranged to store mappings which are

arranged to map data held in fields of the predetermined template to fields within alternative templates, the processor being capable of mapping data stored in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitter for transmission.

20. (Original) A network capable of delivering data to at least one data-handling device, the network comprising a receiver, a transmitter, a processor and a memory, the receiver is arranged to communicate the receipt of a request for data to the processor which is arranged, upon the receipt of such a request, to retrieve data from the memory which has been stored according to one of a plurality of predetermined templates each of which provides a plurality of fields such that each of the fields is capable of containing a portion of the data, the memory also being arranged to store mappings which are arranged to map data held in fields of the predetermined template to fields within alternative templates, the processor being capable of mapping data stored in the predetermined template to alternative templates according to the mappings and sending the mapped data to the transmitter for transmission.

21. (Previously Presented) A method of sending data to at least one remote device, the method comprising the steps of:

i. storing data that it is intended to send to the remote device in one of a plurality of predetermined templates each of which provides a plurality of fields and each of the fields allowing a portion of the data to be stored therein;

ii. storing a plurality of transformations that transform data held within one of the plurality of templates such that the data then corresponds to an alternative template such that

data held in a field of one of the predetermined templates is moved to a field within the alternative template;

iii. transforming the data according to one of the transformations should it be determined that the remote device cannot handle the data as it is stored in the predetermined template;

iv. and sending the data to the remote device.

EVIDENCE APPENDIX

[None]

RELATED PROCEEDINGS APPENDIX

[None]